

REMARKS

Entry of this Amendment, reconsideration and allowance of the above-captioned patent application are respectfully requested. This application relates to cyclic sulfamides for inhibition of gamma secretase.

Claims 1 to 7, 10 and 11 are currently pending in the application. Claims 1 to 7 and 10 have been rejected for obviousness-type double patenting over claims 1 to 16 of U.S. Patent No. 7,041,689 ("the '689 patent"), claims 1 to 6 of U.S. Patent No. 7,138,400 ("the '400 patent"), and claims 1 to 10 of U.S. Patent No. 7,282,513 ("the '513 patent"). Claim 10 has been rejected for non-enablement under 35 U.S.C. § 112, first paragraph. Claim 11 has been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. This indication of allowability is appreciatively acknowledged.

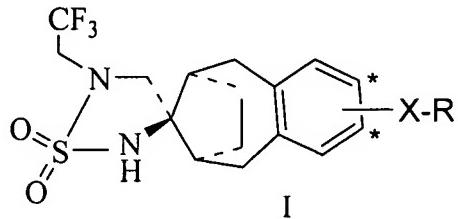
This Amendment amends claim 7 to correct a spelling error and cancels claim 10. All rejections pertaining to claim 10 have been rendered moot by the cancellation of this claim. Applicants reserve the right to prosecute canceled subject matter in one or more future continuation applications. Upon entry of this Amendment, claims in the application will be claims 1 to 7 and 11.

Applicants respectfully traverse the double patenting rejections, on the grounds that the pending claims are not obvious from claims 1 to 16 of the '689 patent, claims 1 to 6 of the '400 patent, and claims 1 to 10 of the '513 patent. It is noted that a proper obviousness-type double patenting rejection compares the claims of an earlier patent with the pending claims, and does not look to the specification of the earlier patent. *See, e.g., Perricone v. Medicis Pharmaceutical Corp.*, 77 USPQ2d 1321, 1323-1325 (Fed. Cir. 2005).

With respect to the '400 patent, Applicants submit that claims 1 to 7 of the instant application would in no way have been obvious over claims 1 to 6 of the '400 patent. In claim 1 of the '400 patent, from which claims 2 to 6 directly or indirectly depend, the definition of R⁴ does not encompass a pyrazole group as required by the instant claims. One skilled in the art would in no way be motivated to substitute a pyrazole group for the list of substituents for R⁴.

There is no teaching, suggestion or motivation to make this change. As such, claims 1 to 7 would in no way have been obvious in view of claims 1 to 6 of the '400 patent.

Regarding the '689 patent, claim 1 of this patent claims compounds of formula I below:



There are non-obvious structural differences between the subject matter of claim 1 of the '689 patent and claims 1 to 7 of this application. First, for the substituent X-R, claim 1 of the '689 patent permits X to be any one of nine different heteroaryl groups: a "bivalent pyrazole, imidazole, triazole, oxazole, isoxazole, thiazole, isothiazole, thiadiazole or 1,3,4-oxadiazole." In contrast, claim 1 of this application requires that X is a pyrazole group, substituted with R¹. Second, the R substituent is selected from groups (i) to (iv) as outlined in claim 1 of the '689 patent and could be at any position of any one of the 9 possible heteroaryl groups. In contrast, the pending claims require the group Ar at a fixed position on the pyrazole ring. Third, claim 1 of the '689 patent requires no substitution on the fused benzene ring **and** the 2,2,2-trifluoroethyl group as shown in Formula I. In contrast, the instant claims require that when X (substituent on the fused benzene ring) is H, R² does not represent 2,2,2-trifluoroethyl.

Dependent claims 2 and 3 of the '689 patent recite various exemplary X groups, including the group 1-methylpyrazol-3-yl among a list of numerous other possibilities. Neither of claims 2 or 3 require the specific R group to be Ar as required and defined by pending claims 1 to 7. There is no teaching, suggestion or motivation to select 1-methylpyrazol-3-yl out of the list of possibilities recited in claims 2 and 3 of the '689 patent and particularly substitute this group with Ar as required by claims 1 to 7 of the instant application. In fact, claim 4 of the '689 patent narrows the substituent X to imidazol-4-yl or 1,2,4-triazolyl, thus teaching away from the present claims. Further, Claims 2 and 3 of the

'689 patent depend from claims 1 and thus also require both no substituent on the fused benzene ring **and** the 2,2,2-trifluoroethyl group as shown in Formula I.

Dependent claims 4 to 7 relate to substituents X and R which are different from those corresponding positions as defined in the instant invention.

Dependent claims 8 to 10 of the '689 patent define various exemplary R groups, including phenyl or heteroaryl. However, these claims depend from claim 1, which defines X very broadly. No single claim teaches specific compounds where R is aryl or heteroaryl **and** X is 1-methylpyrazol-3-yl **and** when X is H then R² does not represent 2,2,2-trifluoroethyl.

Claim 12 recites 5-substituted-1-methylpyrazol-3-yl for X among a list of four other possibilities and claims 13 and 14 recite phenyl or heteroaryl for R. Both these claims depend from claim 11. Again, no single claim teaches specific compounds where R is aryl or heteroaryl **and** X is 1-methylpyrazol-3-yl **and** when X is H then R² does not represent 2,2,2-trifluoroethyl.

Dependent claims 15 (covering pharmaceutical compositions comprising a compound of claim 1) and 16 (covering a method of treatment comprising the administration of a compound of claim 1), do not have any further structural limitations, and thus are no closer to the claimed subject matter than claim 1.

Hence, there are structural differences between the pending claims and claims 1 to 16 of the '689 patent, such that the pending claims are not obvious over the claims of the '689 patent.

Applicants also submit that there are non-obvious structural differences between the pending claims and claims 1 to 10 of the '513 patent. The claims of the '513 patent require both no substitution on the fused benzene ring **and** the 2,2,2,-trifluoroethyl group shown in Formula I. The claims of the instant application require that when X is H, R² does not represent 2,2,2-trifluoroethyl. Thus, when X is H, R² is other than 2,2,2-trifluoroethyl as exemplified in Examples 1 to 14. Alternatively, when R² is 2,2,2-trifluoroethyl, then X must be other than H requiring substitution on the fused benzene ring at a position adjacent to

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the pyrazole group as exemplified in Examples 15 to 17. There is no teaching, suggestion or motivation for the ordinarily skilled chemist having knowledge of claims 1 to 10 of the '513 patent to make the necessary structural modifications to arrive at the present invention. As a result, claims 1 to 7 of the instant application would in no way have been obvious over claims 1 to 10 of the '513 patent.

In view of the arguments made, it is believed that the double patenting rejections have been overcome. It is respectfully requested that these rejections be withdrawn.

Applicants submit that the application is in condition for allowance and passage thereto is earnestly requested. Any additional fees required in connection with this Amendment may be taken from Merck Deposit Account No. 13-2755. The Examiner is invited to contact the undersigned attorney at the telephone number provided below if such would advance the prosecution of the case.

Respectfully submitted,

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